

## ABSTRACT

An apparatus and method for detecting photonic wavelength errors is described. A photonic signal comprised of one or more channels is received. The photonic signal is wavelength shifted by a pair of wavelength shifters with slightly offset shift values to provide a pair of photonic signals with slightly offset wavelengths. The pair of photonics signals is filtered and differentially compared to provide a wavelength error signal.

Docket: 2807.2.22.6